# Complementary and alternative medicine (cam) use among cancer patients in selected tertiary health facilities in southwestern nigeria.

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#### **ABSTRACT**

Complementary and Alternative Medicine (CAM) is a comprehensive term used to refer to Traditional Medicine (TM) systems such as Traditional Chinese Medicine and to various forms of indigenous medicine. A survey was carried out to ascertain the prevalence of the use of CAM among cancer patients attending tertiary hospitals in Southwestern Nigeria. After obtaining permission from Research Ethics Committee and consent from participants, questionnaires were distributed to one hundred and twenty (120) cancer patients attending cancer treatment facilities. The result showed that out of the 64% of the cancer patients presently on CAM, 39% expected cure from the use of CAM while 3% hoped that use of CAM will lead to suppression of growth of the cancer cells followed this trend: 55% of the patients regularly consumed vegetables, 51% were on daily course of vitamins and other supplements, 38% performed regular exercises, while 20% relied on prayers. Fifteen percent of the patients consulted social workers, 12% used music therapy and 7% used local herbs. The study further revealed that consumption of vegetables, vitamins/ supplements and regular exercise was the most common CAM used by the cancer patients. The uses of vitamins/ supplements, vegetable and exercise have formed a mainstay of prescription in the management of cancer in Nigerian hospitals.

**KEY WORDS:** Cancer, CAM, Exercise, Supplements, Vegetable, Vitamins.

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#### INTRODUCTION

The definition of alternative medicine involves a variety of behavior techniques like spiritual techniques and relaxation methods, Clinical approaches such as massage, herbal remedies and chiropractic, have not previously been considered as components of alternative medicine. Clinical therapy also includes mind therapy such as mental images, hypnosis, relaxation and body therapy such acupuncture, chiropractic and herbal treatment. These practices have entered mainstream society and culture but are neither widely taught in medical schools nor generally available in hospitals (Boon et al., 2000). These practices complement mainstream medicine by contributing to health and satisfying demands that are not met by conventional practices. They also diversify the conceptual framework of medicine (Burstein, 2000).

The prevalence of CAM use is estimated at 25% among residents of the United Kingdom, 50% among German, French and Australian populations and 42-69% among residents of the United States (Richardson et al., 2000). Some patients believe that access to CAM should be part of standard cancer treatment. As cancer incidence increases and survival time lengthens, the population seeking information about and access to CAM is likely to increase (Richardson et al., 2000). While the use of Traditional Medicine (TM) remains widespread in developing countries, use of CAM is also increasing rapidly in developed countries. In many parts of the world, policy-makers, health professionals and the public are wrestling with questions about the safety, efficacy, quality,

further availability, presentation and development of this type of healthcare (Burstein et. al, 1999). Complementary medicine includes all such practices and ideas which are outside the domain of conventional medicine in several countries and defined by its users as preventing or treating illness or promoting health and well being. Complementary and Alternative Medicine can also be defined as groups of diverse medical and healthcare systems, practices, products that are not currently part of conventional medicine (Burstein et al., 1999).

The primary objective of this study is to examine CAM use among cancer patients attending selected tertiary health institutions in Southwestern Nigeria.

#### **MATERIALS AND METHODS**

The human subjects used for this research study were cancer patients attending Cancer Centers in two tertiary health institutions in Southwestern Nigeria. The Centers are University College Hospital. Ibadan. (Department of Radiotherapy) and Lagos University Teaching Hospital (Department of Surgery). Ethical approval was obtained from the University of Ibadan/ University College Hospital Health Research Ethics Committee and Lagos University Teaching Hospital. Informed consent and questionnaires were distributed to one hundred and twenty cancer patients. The participants were assisted on completing parts of the questionnaire that seemed difficult for them to complete. The participants were eighteen years old and above and included

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both males and females. Only one hundred respondents were received.

#### **QUESTIONNAIRE**

CAM therapies were classified into seven major categories: special diets (vegetarian, vega, macrobiotics, gershon diets and others), psychotherapy (with social workers. psychologist or support group), movement and physical therapy (exercise, yoga, taichi or chigong, chiropractic or osteopactic manipulation and massage), mind or body therapy (imagery/ visualization, hypnosis, meditation, biofeedback, energy healing or therapeutic touch, journaling and music therapy), spiritual practices (prayer for self and prayer/ spiritual healing by others), vitamins and herbs (melatonin, essiac, mistletoe, laetrile, shark or bovine cartilage, homeopathy, ayurvedic and folk remedies) and other approaches such as immune-augmentative treatment, 714X cancel, bioelectromagnetic therapy and acupuncture (Lee et al., 2000).

After the patients were admitted in the hospital, the purpose of the study and the administered questionnaire were explained to them. Their eligibility was then determined as part of the consent process. The patients were allowed the freedom of withdrawal from the study at any time and that they were at liberty to skip any survey question. To increase accuracy, patients were requested to indicate their responses directly on the questionnaires. Questionnaires were returned to the principal investigator at the clinic. All questionnaires were coded before administration to the participants to ensure confidentiality.

#### **RESULTS**

Out of the 64% of the cancer patients still using CAM, 39% expected cure, 3% wanted suppression of cancer growth and 4% were expecting complementary effect with the conventional therapy while 3% expected symptomatic relief only with the use of CAM (Table 1). Fifty-one (51%) of the patients using CAM indicated that there was improvement with the use of CAM while 8% of them said there was no improvement and 18% of them were not sure if there was improvement or not.

Table 2 shows that 55% of the cancer patients from the study population used vegetables, 51% of the cancer patients took vitamins and other supplements, 38% performed routine exercises, 20% used prayer (by themselves), 15% consulted social workers, 12% used music therapy and 7% used local herbs. Twenty-eight percent (28%) of those patients who used CAM claimed that they derived satisfaction while seven (7%) percent did not derive any satisfaction (Fig. 1).

## **DISCUSSION**

The awareness of the use of Complementary and Alternative Medicine (CAM) increases everyday as the number of cancer patients increases (Table 1). This can be related to the incorporation of CAM to treatment plan in the hospitals. CAM treatment employed in the hospitals includes, use of vitamins/ supplements, advising patients to take more vegetable, fruits and perform regular exercise. The high proportion of the study population still affirming that they were using CAM

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presently at the time of the research confirmed its inclusion into medical practice. The patients accepted it as part of their treatment plan and complied appropriately. The desire of some of the study population was to obtain cure from the disease from the use of CAM. Some were however concerned about the suppression of growth as well as relieve from its symptoms. More than half of the patients (Table 1) confirmed that there was improvement as they used CAM. For those who failed to recognize any improvement, their providers attributed non-compliance to the use of CAM.

Only few patients in the study population complained about adverse effect of CAM prescribed by their CAM providers. This showed that they were tolerated by most of the patients. The main source of dissemination of the information of CAM used (such as vitamins/ supplements, vegetables, exercise and support from social workers, psychologist and psychiatrists) in the health institution is the health personnel. This justifies its inclusion in medical practice.

Vegetable was the most commonly used CAM among the participants followed by vitamins/ supplements (vitamin C and vitamin E), exercise, prayer by self, social workers intervention and music therapy respectively. This could be attributed to the fact that these CAM were easily available, affordable and no special skill was required for their use. It was believed that the vegetable and vitamins would help to improve certain functions in the body and improve immunity as well (Decker, 2007). The evidence for a protective effect of vegetable and fruit consumption is consistent

with previous findings in cancers of the stomach, esophagus, lung, oral cavity and pharynx, endometrium, pancreas and colon (Van *et al.*, 2000). The types of vegetable or fruits which mostly appear to be protective against cancer were raw vegetables, followed by allium vegetables, carrots, green vegetables and tomatoes. Substances present in the vegetables that have been found to offer protection against cancer and proliferation of cancer cells are isoflavones, saponins, vitamin C, vitamin E, phytosterols, allium compounds among others (Van *et al.*, 2000).

Studies have also shown that overall; exercise had a positive effect on physical and psychological functioning of cancer patients while under treatment. These benefits include: increased functional capacity, increased lean muscle mass, decreased body fat, improved natural defense mechanisms, decreased nausea and fatigue, improved sense of control, improved mood, improved self esteem and improved quality of life. Exercise rehabilitation had a beneficial effect on the physical and psychological well being of patients with breast cancer (ARFA, 1999; Quinn, 2003).

One limitation of the present study is that participants were unable to provide all samples and full information of CAM used except for vitamins, massage and prayer. Furthermore, the study focused on all types of cancer presentation at the two study centers and was not designed to evaluate in quantifiable terms the efficacy and adverse effects the CAM used by the patients.

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### CONCLUSION

Uses of vitamins/ supplements, vegetable, exercise and involvement of social workers have been included in management of cancer in Nigerian hospitals. Complementary and Alternative Medicine (CAM) has been accepted as part of conventional treatment by cancer

patients who expect cure or suppression of cancer growth from the use of CAM.

It is very important that as CAM is on the increase among patients attending health facilities in Nigeria, the clinical evaluation of CAM, drug interactions and its side effects should be undertaken to ascertain their safety and effectiveness.

**Table 1: Effectiveness And Adverse Effect Of Cam Use Among Cancer Patients** 

VARIABLE	FREQUENCY (n)	PERCENTAGE (%)
STILL USING CAM NOW		
Yes	64	64
No	15	15
Not indicated	21	21
Total	100	100
CAM USE EFFECTIVENESS		
Suppress cancer growth	3	3
Cure	39	39
Symptom relief	3	3
Complementary effect	4	4
Suppress cancer growth + cure	1	1
Suppress cancer growth+Cure + symptom relief +	12	12
Complementary effects		
Suppress cancer growth +Symptom relief	3	3
Cure + Symptom relief	3	3
Suppress cancer growth +Symptom relief +	2	2
complementary effect		
Cure + Complementary effect	2	2
Suppress cancer growth + cure + symptom relief	4	4
Not Indicated	24	24
Total	100	100

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Table 2: Types Of Cam Use Among Cancer Patients.

VARIABLE	FREQUENCY (n)	PERCENTAGE (%)
TYPES		
Vegetable	55	55
Gershon's diet	1	1
Social worker	15	15
Psychologist	4	4
Psychiatrist	1	1
Support group	4	4
Exercise	38	38
Yoga	3	3
Massage	5	5
Imagery/Visualization	6	6
Hypnosis	3	3
Meditation	2	2
Music therapy	12	12
Prayer (by self)	20	20
Prayer by others/ spiritual healing	3	3
Vitamins/supplement	51	51
Folk remedies	1	1
Burton's immune therapy	4	4
Other herbs	7	7
DISCUSSION OF CAM WITH DOCTOR		
YES	60	60
NO	25	25
Undisclosed	15	15
Total	100	100

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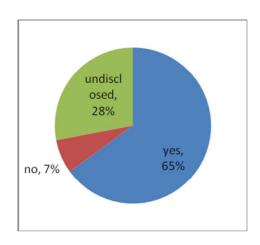


Figure 1: Satisfaction with CAM Treatment by Cancer Patients

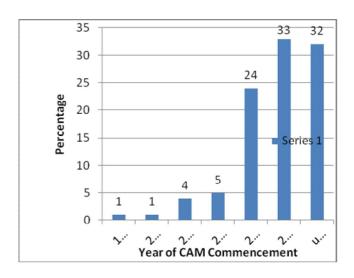


Fig. 2: Year of CAM Commencement by Cancer Patient

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